TENTATIVE PROGRAM FOR THE INTERNATIONAL SYMPOSIUM ON SMOOTH MUSCLE CONTRACTION: RECENT ADVANCES

Both the topics and the speakers are listed. Most of the speakers have been contacted and signified their assent and provided the title (given below) of their topics. Copies of letter from some are attached. Others have communicated by telephone.

1 **Ultrastructure**

1.1 Molecular structure and filament organization in single cells. - F.S. Fay, Dept. of Physiol., Univ. of Mass. Med. Sch. Worcester, MA 01605.

1.2 Cellular structure of the excitation-contraction coupling apparatus - Sarcolemma and sarcoplasmic reticulum. A.P. Somlyo, Chmn., Dept. Physiol., Univ. of Virginia, Sch of Med., Charlottesville, VA 22908.

2 **Mechanics and Energetics**

2.1 Crossbridge transients induced by caged nucleotides. A.V. Somlyo, Dept. Physiol., Univ. Virginia, Sch of Med, Charlottesville, VA 22908.

2.2 ATP analogues and energetics of skinned smooth muscle contraction. A. Arner, Dept. of Physiol and Biophysics, Univ. of Lund, S-223 62 Lund, Sweden.

2.3 Slowing of crossbridge cycling rate in mammalian smooth muscle. M.J. Siegman, Dept. of Physiol, Jefferson Med Col, Thomas Jefferson University, Philadelphia, PA 19107.

2.4 Mechanical studies conducted at myosin and actin filament level D. Warshaw, Dept. of Physiol. and Biophysics, Univ. of Vermont, Burlington, VT 05405.

2.5 Smooth muscle energetics: models. R.J. Paul, Dept. of Physiology and Biophysics, Univ. of Cincinnati Col of Med, Cincinnati, OH 45267-0576.

2.6 Stiffness and energetics of active shortening of smooth muscle. P. Hellstrand, Deptartment of Physiol, and Biophysics, Univ. of Lund, S-233 62 Lund, Sweden.

2.7 Study of biophysical and biochemical factors regulating smooth muscle shortening and relaxation. N.L. Stephens, University of Manitoba, Department of Physiology.

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3 **Biochemistry of Contractile and Regulatory Proteins**

3.1 Smooth muscle myosin heavy chain and actin isoforms. M.P. Sparrow, Dept. of Physiol, Univ. of W Australia., Nedlands, W. Australia.

3.2 Mysoin filamentogensis. S. Lowey, Rosenstiel Basic Med Sci Cen., Brandeis Univ., Waltham, MA 02254.

3.3 Calcium regulation of smooth muscle regulatory proteins. S. Ebashi, President, National Institute for Physiol. Sci., Myodaiji, Okazaki, 444 Japan.

3.4 Caldesmon and calponin in regulation of smooth muscle contraction. M.P. Walsh, Dept. of Med Biochem., Univ. of Calgary, Calgary, Alberta, Canada T2N 4N1.

3.5 Tropomyosin and smooth muscle acting-activated myosin ATPase activity. S. Chacko, Dept. of Pathophysiol, Univ. of Pennsylvania, Philadelphia, PA 19104.

3.6 Calcium sensitivity in vascular smooth muscle., C.M. Rembold, Dept. of Int. Med., Division of Cardiol., Univ. of Virginia, Charlottesville, VA 22908.

4 **Enzymology of Smooth Muscle Contraction**

4.1 Myosin light chain kinase I. Multimeric forms. A. Sobieszek, Inst of Mol Biol., Austrian Academy of Sci., A-5020 Salzburg, Austria.

4.2 Myosin light chain kinase II. Domains. D. Hartshorne, Dept. of Animal Nutrition, Univ. of Arizona at Tucson, Tucson, Arizona.

4.3 Myosin light chain kinase III. Structure and function. V. Guerriero, Univ. of Arizona at Tucson, Tucson, Arizona.

4.4 Myosin light chain kinase IV. the Myosin light chain kinases and kinetics of myosin phosphorylation. J.T. Stull, Head, Dept. of Pharmacol and Moss Heart Centre, Univ. of Texas Health Sci Cen, Dallas, TX 75235.

4.5 Myosin light chain phosphatases I: Structure and function. J. DiSalvo, Chmn, Dept. of Physiol, Univ. of Duluth, Duluth, MN.

4.6 Myosin light chain phosphatases II. Isoforms, M.L. Pato, Dept. of Biochem, Univ. of Saskatchewan, Saskatoon, Saskatchewan, Canada S7N 0W0.

4.7 Protein kinase C and smooth muscle contraction. M. Chatterjee, Dept. of Pharmacol., Selwring Corporation. Bloomfield, New Jersey, NJ 07003.

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5 **Regulatory Mechanisms in Intact and Skinned Muscles**

5.1 Contraction kinetics. U. Peiper, Head, Inst. of Physiol, Univ of Hamburg, Hamburg 20, Germany.

5.2 Myosin light chain phosphorylation and its relation to Latch. S. Driska, Dept. of Physiol and Biophysics, Univ. of Pittsburgh Sch of Med, Pittsburg, PA USA.

5.3 Biochemical model of smooth muscle contraction. R.A. Murphy. Dept. of Physiol and Biophysics, Univ. of Virginia, Sch of Med., Charlottesville, Virginia, VA 22908.

5.4 Activation of muscle contraction: the role of phosphorylation. J C. Ruegg, II Physiol Inst., Univ. of Heidelberg, D-6900 Heidelberg, Germany.

5.5 Regulation of skinned smooth muscle contraction. W.G. Kerrick, Dept. of Physiol., Biophysics and Pharmacol., Univ. of Miami, Sch of Med., Miami, FA 33101.

6 **Smooth Muscle Pathophysiology**

6.1 Asthma I. Biophysical changes in sensitized airway smooth muscle contraction and relaxation. H. Jiang, Dept. of Physiol., Fac of Med., Univ. of Manitoba, Winnipeg, Manitoba, R3E 0W3, Canada.

6.2 Asthma II. Myofibrillar ATPase, myosin light chain phosphorylation stoichiometry and myosin light chain kinase activity in sensitized airway smooth muscle. A.J. Halayko, Dept. of Physiol., Fac. of Med., Univ. of Manitoba, Winnipeg, Manitoba R3E 0W3, Canada.

6.3 Hypertension I. The role of the membrane. W. Bohr/R. Clifton Weble, Dept. of Physiol., Univ. of Michigan, Ann Arbor, Michigan.

6.4 Hypertension II. The molecular biology of the vascular wall. G. Owens. Univ of Virginia, Charlottesville, VA 22908.

6.5 Persistent pulmonary hypertension of the new born. J. Belik, Dept. of Pediatrics, Univ. of Manitoba, Winnipeg, Manitoba.

6.6 Effect of high altitude and hypoxia on smooth muscle. Bingyong Sun, Director, High Altitude Res Inst, 3rd Military Med Univ, Chongqing, Sichuan, P.R. China 630038.

7 **Poster Sessions**

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